

**CVP Water Supply Partial Contract Assignment
from Mercy Springs Water District
(Contract Number 14-06-200-3365A)
to Westlands Water District
Distribution District No. 1**

Draft Environmental Assessment

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**APPROVAL OF PARTIAL CONTRACT ASSIGNMENT
FROM MERCY SPRINGS WATER DISTRICT
TO WESTLANDS WATER DISTRICT
DISTRIBUTION DISTRICT NO. 1**

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LIST OF ACRONYMS AND ABBREVIATIONS

Abbreviation	Description
af	acre-feet.
af/y	acre-feet per year.
CEQA	California Environmental Quality Act.
CVP	Central Valley Project.
CVPIA	Central Valley Project Improvement Act.
DMC	Delta Mendota Canal.
Devine & Wood	Devine and Wood Farming Company (and related entities).
Drain	San Luis Drain.
EA	Environmental Assessment.
EIR	Environmental Impact Report.
EIS	Environmental Impact Statement.
ESA	Endangered Species Act.
FONSI	Finding of No Significant Impact.
1998 FONSI	November 6, 1998 action approving the assignment of up to the entire 13,300 af/y of MSWD's CVP contract to PVWMA.
1999 FONSI	April 12, 1999 action approving the assignment of 6,260 af/y of MSWD's CVP contract to PVWMA, SCVWD and WWD.
FWCA	Fish and Wildlife Coordination Act.
GAF	Grassland Area Farmers.
MSWD	Mercy Springs Water District.
NEPA	National Environmental Policy Act.
PDD	Panoche Drainage District.
Project	Central Valley Project.
PVWMA	Pajaro Valley Water Management Agency.
Reclamation	United States Department of Interior-Bureau of Reclamation.
SCVWD	Santa Clara Valley Water District.
SJRWQIP	San Joaquin River Water Quality Improvement Project.
USBR	United States Department of Interior-Bureau of Reclamation.
USGS	United States Geological Survey.
WWD	Westlands Water District.

ENVIRONMENTAL ASSESSMENT

APPROVAL OF PARTIAL CONTRACT ASSIGNMENT FROM MERCY SPRINGS WATER DISTRICT TO WESTLANDS WATER DISTRICT DISTRIBUTION DISTRICT NO. 1

SUMMARY

The United States Bureau of Reclamation (Reclamation) proposes to approve the partial assignment of its Central Valley Project (CVP or Project) water service contract with the Mercy Springs Water District (MSWD) (Contract Number 14-06-200-3365A and all renewals and extensions thereof) to Westlands Water District Distribution District No. 1 (WWD). The partial contract assignment involves changing the place of use of water from land historically owned and farmed by Donald Devine, David E. Wood, and their affiliated entities (Devine & Wood) in MSWD to farmland owned or controlled by Devine and Wood in WWD. This partial contract assignment is for an entitlement of 4,198 acre-feet per year (af/y).

The Proposed Action is a separate action but is related to two prior decisions made by Reclamation. On November 6, 1998, Reclamation approved the 1998 Finding of No Significant Impact (FONSI) for assignment of up to the entire 13,300 af/y of MSWD's CVP contract to Pajaro Valley Water Management Agency (PVWMA). At the time of FONSI approval, PVWMA had no facilities in place to make beneficial use of the CVP water. The contract assignment to PVWMA did not occur following the 1998 FONSI. Subsequently, on April 12, 1999, Reclamation approved the joint assignment of 6,260 af/y of MSWD's CVP contract to PVWMA, Santa Clara Valley Water District (SCVWD), and WWD (1999 FONSI). The 4,198 af/y of water affected by this proposed contract assignment was addressed by the 1998 FONSI, but was not included in the 1999 FONSI.

The Proposed Action is a legal action whereby WWD permanently assumes the rights and obligations under the portion of the MSWD water service contract being assigned. As a result, Reclamation would be contractually obligated to provide to WWD a portion of the CVP water that is currently delivered to MSWD. In contrast, the actual conveyance of water from one user to another may not specifically occur at the time of contract assignment. A separate California Environmental Quality Act (CEQA) document has been prepared for concurrent public review and approval that addresses the conveyance of the water.

SECTION 1 - PURPOSE OF AND NEED FOR THE PROPOSED ACTION

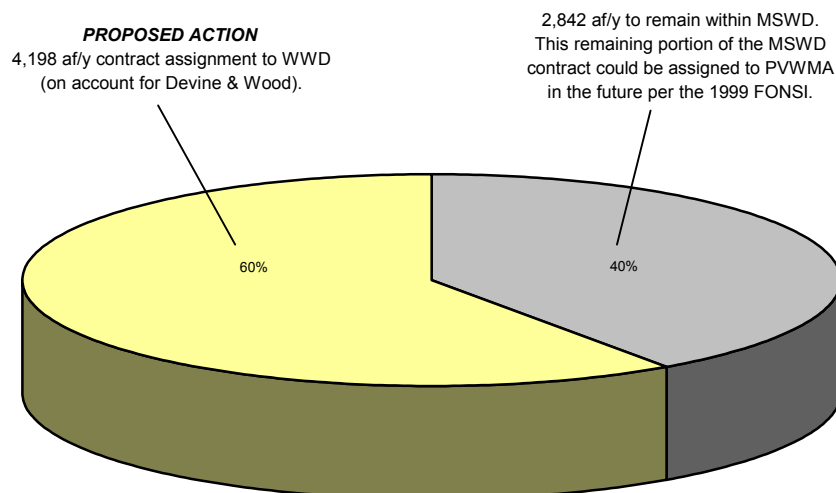
1.1 The Proposed Action

The United States Bureau of Reclamation (Reclamation) proposes to approve the partial assignment of its Central Valley Project (CVP or Project) water service contract with the Mercy Springs Water District (MSWD) (Contract Number 14-06-200-3365A and all renewals and extensions thereof) to Westlands Water District (WWD) Distribution District No. 1. Distribution District No. 1 is composed of all of the Priority Area II lands (see Section 3.1.1 for a description of priority areas) in WWD. The partial contract assignment involves changing the place of use of water from land historically owned and farmed by Donald Devine, David E. Wood, and their affiliated entities (Devine & Wood) in MSWD to farmland owned or controlled by Devine and Wood in WWD. All water affected by the proposed partial assignment has been historically put to beneficial use within MSWD, and would be put to beneficial use in WWD following the partial assignment. This partial contract assignment is for an entitlement of 4,198 acre-feet per year (af/y).

1.1.1 Background on the Proposed Action

The Proposed Action is a separate action but related to two prior decisions made by Reclamation. On November 6, 1998, Reclamation approved the 1998 Finding of No Significant Impact (FONSI) for the assignment of up to the entire 13,300 af/y of MSWD's CVP contract to Pajaro Valley Water Management Agency (PVWMA). At the time of FONSI approval, PVWMA had no facilities in place to make beneficial use of the CVP water. The contract assignment to PVWMA did not occur following the 1998 FONSI. Subsequently, on April 12, 1999, Reclamation approved the joint assignment of 6,260 af/y of MSWD's CVP contract to PVWMA, Santa Clara Valley Water District (SCVWD), and WWD (1999 FONSI). Although the 1998 FONSI remains in effect regarding the balance of MSWD's 13,300 af/y contract (7,040 af/y), it is the intention of the parties to the current proposed action that 4,198 af/y of MSWD's water service contract be assigned to WWD (for the exclusive use of Devine & Wood). The balance of MSWD's contract (2,842 af/y) is still subject to the 1998 FONSI and is not addressed in this Environmental Assessment (EA). Figure 1 graphically depicts the breakdown of MSWD's 7,040 af/y CVP water supply contract as a result of the Proposed Action.

Figure 1. Breakdown of MSWD's Current 7,040 af/y CVP Contract.



The Proposed Action is a legal action whereby WWD permanently assumes the rights and obligations under the portion of the MSWD water service contract being assigned. As a result, Reclamation would be contractually obligated to provide to WWD a portion of the CVP water that is currently delivered to MSWD. In contrast, the actual conveyance of water from one user to another may not specifically occur at the time of contract assignment. A separate California Environmental Quality Act (CEQA) document is being prepared for concurrent public review and approval that addresses the conveyance of the water.

The Proposed Action would not affect CVP operations and would not change existing diversion points. The transferred water would be used on a similar diversion schedule and would be conveyed by the San Luis Canal rather than the Delta Mendota Canal. This transfer of water by the same farming entity will balance out local deficiencies and make the most beneficial use of available supplies. Transfer of this water into WWD would reduce the need for transfers of alternate sources of surface water.

Locations of the two water districts are shown in Figure 2. MSWD and WWD are located near each other in the central San Joaquin Valley, and are both existing CVP water contractors. WWD is located in western Fresno and Kings Counties and MSWD is located in western Fresno County. The Devine & Wood land in WWD is within Fresno County, so the water affected by the partial contract assignment will remain within Fresno County.

1.2 Purpose and Need for the Proposed Action

The purpose of the Proposed Action is to move 4,198 af/y from MSWD to WWD. The need for the Proposed Action is two-fold: Devine & Wood needs to transfer the water out of MSWD as there is no longer a beneficial use for it in MSWD, and Devine & Wood has to transfer water into WWD as there is a chronic water supply shortfall in WWD.

1.2.1 Need to Transfer Water out of MSWD

The land owned by Devine & Wood within MSWD was included in the San Joaquin River Water Quality Improvement Project (Section 1.4.2.4 describes the SJRWQIP). While these lands continue to be actively cultivated, salt tolerant crops have replaced the historical crop mix, and drainwater is now used for irrigation. The water supply included in the Proposed Action is no longer needed in MSWD and needs to be transferred out of MSWD to be put to beneficial use.

1.2.2 Need to Transfer Water into WWD

WWD has an existing CVP water service contract for 1,150,000 af/y; however, due to Congressional, regulatory, and environmental actions, the reliability of this CVP supply has been reduced significantly. The estimated average long-term supply for WWD is 65-70% of its water service contract, or about 747,500-805,000 af/y. Prior to 1990, WWD's average CVP water supply, including interim CVP water when it was available, was approximately 1,250,000 af/y. Groundwater pumping in WWD averaged approximately 150,000 af/y to meet the water demand of 1,400,000 af/y. To make up for the difference between the available CVP water supply and demands, WWD and individual landowners are projected to obtain additional water supplies in the future as may be required to supplement groundwater pumping. As a district, WWD participates in transfers and supplemental water purchases for the benefit of its landowners. Individual

Figure 2. Location Map.



landowners also transfer water in and acquire supplemental water for use on their own land.

Throughout the 1990s, in all but the driest of years, WWD and its growers have been able to successfully obtain, through water purchases and exchanges from other water purveyors and/or groundwater pumping, enough water to supplement their existing CVP water supply to meet demands within WWD and provide some water for carryover into the following water year. Devine & Wood and their related entities have historically farmed lands within both MSWD and WWD and have been supplementing their WWD CVP water supply through water transfers and groundwater pumping. Water transfers of up to 3,973 acre-feet (af) from land owned by Devine & Wood in MSWD to farmland in WWD have occurred each year since 1993, with the exception of 1996. Table 1 illustrates these annual transfers from MSWD to WWD by Devine & Wood.

Table 1. Historical Water Deliveries from MSWD to WWD by Devine & Wood.

Year	CVP Allocation	Transfers from MSWD to WWD	
2000	65%	2,518	af
1999	70%	2,786	af
1998	100%	3,973	af
1997	90%	2,400	af
1996	95%	0	af
1995	100%	1,500	af
1994	43%	1,469	af
1993	50%	300	af

The outcome of this partial contract assignment will be the permanent transfer of 4,198 af of CVP water on behalf of a landowner, Devine & Wood, to increase the beneficial use of the water. Under the Proposed Action, the partial contract assignment will be to WWD, however, the assignment is similar to an individual landowner transaction for the benefit of Devine & Wood, with WWD crediting the water to the Devine & Wood account.

1.3 Objectives of the Action

The Proposed Action would help to balance out local deficiencies and increase the beneficial use of the available water supply. The proposed partial contract assignment would reduce the need for supplemental surface water transfers and groundwater pumping in WWD, and is needed because of chronic water shortages that have occurred and are expected to continue to occur in WWD. The water involved in the assignment will be used by Devine & Wood to help make up for some of these water shortages. As such, the partial contract assignment of the CVP water from MSWD to Devine & Wood farmland in WWD will help reduce dependence on transfers and groundwater pumping.

The Devine & Wood historically owned land in MSWD has been marginal farmland and has recently been purchased by the Panoche Drainage District (PDD) for use in the San Joaquin River Water Quality Improvement Project (SJRWQIP), which is further explained in Section 1.4.2.4. The MSWD land is drainage impaired and has generally been less productive, supporting only lower value and less labor intensive crops.

The land within WWD on which the water would be used following the partial assignment is not drainage impaired, and is generally higher quality land planted primarily to permanent crops or higher value row and field crops, all of which are more labor intensive. As a result, the proposed partial contract assignment would improve the beneficial use of the subject water supply and create additional benefits to the local area.

1.4 Scope of this Environmental Analysis

1.4.1 History of the Planning

The Proposed Action is a legal action whereby WWD permanently assumes the rights and obligations under the portion of the MSWD water service contract being assigned. As a result, Reclamation would be contractually obligated to provide to WWD a portion of the CVP water that is currently delivered to MSWD. In contrast, the actual conveyance of water from one user to another may not specifically occur at the time of contract assignment. A separate CEQA document is being prepared for concurrent public review and approval that addresses the conveyance of the water.

The partial contract assignment will reduce the delivery of CVP water to the MSWD; the EA prepared for the 1998 Action (reference FONSI No. 02-99 1106(210)) assesses the impact of the removal of the existing surface water supply (up to the entire 13,300 af/y supply) from MSWD for both the short-term and long-term. In addition, the PDD has purchased land within MSWD, including the Devine & Wood land, for use in the SJRWQIP. As such, the Devine & Wood land will no longer be farmed using CVP water supplies (see below), hence, there will be no impact on MSWD as a result of this partial contract assignment.

1.4.2 Related Environmental Documents

1.4.2.1 1998 CVP Water Supply Contract Assignment FONSI

The environmental impacts associated with MSWD assigning up to its entire 13,300 af/y water service contract to PVWMA were analyzed in the EA prepared in 1998 that led to the 1998 FONSI. The 1998 FONSI found that the “CVP Water Supply Contract Assignment is not a major federal action that would significantly affect the quality of the human environment and, therefore, that an Environmental Impact Statement is not required for the proposed action. The proposed action consisted of the assignment of the Central Valley Project water supply contract from the Mercy Springs Water District to the Pajaro Valley Water Management Agency”. (USBR, 1998).

1.4.2.2 1999 CVP Water Supply Partial Contract Assignment FONSI

At the time of the potential contract assignment addressed in the 1998 FONSI, PVWMA had no facilities in place to make beneficial use of the CVP water and the contract assignment to PVWMA did not occur. Subsequently, the environmental impacts associated with MSWD partially assigning 6,260 af/yr of the 13,300 af/y to PVWMA, SCVWD and WWD were analyzed in the EA prepared in 1999 that led to the 1999 FONSI and the resultant joint partial contract assignment. The 1999 FONSI found that the “Central Valley Project (CVP) water supply partial contract assignment is not a major federal action that would significantly affect the quality of the human environment and, therefore, that an Environmental Impact Statement is not required for the Proposed Action. The Proposed Action is the assignment of a portion (6,260

af/y) of the CVP water supply contract from Mercy Springs Water District (MSWD) to the Pajaro Valley Water Management Agency (PVWMA), Santa Clara Valley Water District (SCVWD), and Westlands Water District (WWD)". (USBR, 1999).

The transfer of the 6,260 af/y of CVP water from MSWD to WWD and SCVWD was approved in a Negative Declaration and Environmental Checklist prepared in compliance with the CEQA which was adopted by WWD on April 1, 1999. The transfer of water to PVWMA was not addressed because PVWMA did not have facilities in place to use the CVP water. The project title of the CEQA document is "Water transfer of up to 6,260 af/y of Central Valley Project water from Mercy Springs Water District to Westlands Water District and Santa Clara Valley Water District". This CEQA document addressed the actual movement and delivery of the water to WWD and SCVWD that was acquired through the contract assignment. This document concludes that the transfer of the CVP water from MSWD to WWD would not have a significant effect on the environment and, accordingly a Negative Declaration was adopted by for the water transfer portion of the project.

1.4.2.3 2000 Grassland Bypass Project EIS/EIR

The Grassland Bypass Project uses the Grassland Bypass Channel and the San Luis Drain (Drain) to remove agricultural drainwater from the Grasslands area and wetland water supply channels. A draft Environmental Impact Statement (EIS) and Environmental Impact Report (EIR) regarding the proposed continuation of the 1995 Grassland Bypass Project until 2009 under a new agreement was submitted to Reclamation on December 19, 2000. "The overall objective of the proposed 2001 Use Agreement/Grassland Bypass Project is for the [Grassland Area Farmers] GAF to use a 28-mile segment of the Drain to convey agricultural subsurface drainwater (approximately 35,000 acre-feet annually) to a point of discharge at Mud Slough on the San Joaquin River system. To continue to use the Drain the GAF agree to meet specific load values for selenium" (USBR, 2000). See Section 1.4.2.4 for a description of the relationship between the Grassland Bypass Project and the Devine & Wood land in MSWD.

1.4.2.4 2000 San Joaquin River Water Quality Improvement Project, Phase I Initial Study and Negative Declaration

As a result of the drainage discharge requirements imposed by the Grasslands Bypass Project EIS/EIR, the Panoche Drainage District (PDD) commenced with the initial development of an "In-Valley Treatment/Drainage Reuse Facility". In September 2000, "the Panoche Drainage District (Lead Agency for CEQA), in cooperation with the San Luis & Delta Mendota Water Authority, propose to acquire up to 6,200 acres of agricultural land for the treatment of agricultural subsurface drainwater" in an Initial Study and Negative Declaration. The land owned by Devine & Wood within MSWD was included in the 6,200 acre project area and has since been sold to the PDD to be utilized in the PDD's SJRWQIP. (The terms of sale specifically reserved the MSWD CVP water entitlement associated with the sale property to Devine & Wood). These lands will continue to be farmed using drainage water for irrigation of salt tolerant crops that are biologically capable of taking up selenium while evapotranspiring water. This will reduce both the volume of drainage water and amount of selenium discharged to the San Joaquin River. Drainwater from the project will be discharged to the Grassland Bypass, which will prevent

contaminated drainage water from entering wetlands and wildlife habitat in the Grasslands area (see Section 1.4.2.3).

1.5 Decisions Related to the Proposed Action

Under Reclamation law, authorization must be obtained from Reclamation for the partial assignment of the MSWD CVP contract to WWD that constitutes the Proposed Action. In taking action on the assignment, Reclamation must ensure that requirements of the National Environmental Policy Act (NEPA) have been met. This document is intended to provide the environmental analysis and public disclosure requirements of NEPA.

Upon completion of the required environmental compliance, Reclamation will determine whether to approve the Proposed Action. In considering the approval, Reclamation will specify contingencies and conditions which must be met before the contract can be assigned. These contingencies and conditions will be included as parts of the assignment agreement between WWD and MSWD and include the assumption of any obligations, payments, management practices and actions required under the current contract with Reclamation.

Other requirements related to the Proposed Action include certain consultations to ensure compliance with various federal laws and Executive Orders.

1.6 Applicable Regulatory Requirements and Required Coordination

County approval will not be required since the water will continue to be used by Devine & Wood in Fresno County and no groundwater extractions will occur as the result of the partial assignment.

SECTION 2 - ALTERNATIVES TO THE PROPOSED ACTION

2.1 Introduction

The proposed action is the partial assignment of up to 4,198 af/y of the MSWD CVP water service contract (including all renewals and extensions thereof) to the WWD, which will result in water from lands historically owned by Devine & Wood in the MSWD being used on farmland owned or controlled by Devine & Wood in WWD. All lands affected by this contract assignment are within the CVP service area and are within Fresno County.

2.2 History and Process Used to Formulate Alternatives

The proposed action is essentially a landowner to landowner transfer, however, since the water will be permanently assigned by MSWD to WWD, it is possible that either agency could make other arrangements. These alternatives are presented in Section 2.3.

2.3 Description of the Proposed Alternatives

2.3.1 No Action Alternative

Under the no-action alternative, the partial contract assignment would not take place. Because the Devine & Wood lands in MSWD were acquired by the PDD for use in the SJRWQIP to aid in the reduction of drainage water and selenium discharged to the Grassland Bypass, the CVP water is not required by the MSWD land and annual transfers of the water by Devine & Wood from MSWD to WWD would continue to occur.

2.3.2 Alternative Action A-Assignment to PVWMA

This alternative consists of the assignment of Devine & Wood's portion (4,198 af/y) of the MSWD CVP contract to PVWMA. A thorough environmental assessment was prepared during 1998 of assigning up to 13,300 af/y to PVWMA; that EA lead to the FONSI approved by Reclamation on November 6, 1998. This alternative was not evaluated in this EA because it only fulfills one of the two needs of the Proposed Action.

2.3.3 Alternative Action B-Assignment of Another CVP Contract

This alternative would involve Devine & Wood/WWD seeking the assignment of a CVP contract held by another water agency other than MSWD. This alternative was not evaluated in this EA because it only fulfills one of the two needs of the Proposed Action. As there currently is no other identified agency with which Devine & Wood/WWD have a letter of intent, and Devine & Wood has MSWD water available for transfer, this alternative would be speculative and therefore, was rejected from further consideration.

2.3.4 Alternative Action C-Assignment to Another Willing Assignee

This alternative would involve MSWD seeking the assignment of the Devine & Wood portion of the CVP contract to another entity other than WWD. This alternative was not evaluated in this EA because it only fulfills one of the two needs of the Proposed Action. As there are no other identified entities with which MSWD has a letter of intent, and Devine & Wood has land within WWD that needs additional water, this alternative would be speculative and, therefore, was rejected from further consideration. In addition, because the water supply subject to the partial assignment has been reserved to Devine & Wood, such an assignment could not occur without their consent.

2.3.5 Alternative Action D-Leaving the Water in MSWD

This alternative would involve leaving the Devine & Wood portion of the CVP contract in MSWD for use in MSWD. This alternative was not evaluated in this EA because it only fulfills one of the two needs of the Proposed Action. As the Devine & Wood lands in MSWD are now farmed with drainage water from the SJRWQIP (see Section 1.4.2.4), the water is no longer needed in MSWD.

2.4 Alternatives Design, Evaluation and Selection Criteria

Each alternative was evaluated to determine meeting the needs, economics and feasibility for the benefit of Devine & Wood.

2.5 Alternatives Considered but Eliminated from Further Consideration

Only the Proposed Action and the No Action Alternative are analyzed. All other alternatives are eliminated from further consideration because they did not fulfill both needs of the Proposed Action.

2.6 Description of Past, Present and Reasonably Foreseeable Future Actions not Part of the Proposed Project but Related to Cumulative Effects

2.6.1 Past Actions

On April 12, 1999, Reclamation approved the joint assignment of 6,260 af/y of MSWD's CVP contract to PVWMA, Santa Clara Valley Water District (SCVWD), and WWD (1999 FONSI). This reduced the MSWD CVP contract from 13,300 af/y to 7,040 af/y.

2.6.2 Present Actions

Devine & Wood annually transfers its available water from MSWD into WWD.

2.6.3 Future Actions

The remaining MSWD contract amount of 2,842 af/y (after approval of the Proposed Action) could still be assigned to the PVWMA under the 1998 FONSI or similar action. The 1998 FONSI analyzed the cumulative effects of the entire contract amount being transferred.

SECTION 3 - AFFECTED ENVIRONMENT

3.1 Introduction

The affected environment in MSWD was addressed in the EA for the 1998 FONSI and the EA for the 1999 FONSI and is herein incorporated by reference (*in italics*). Since the Proposed Action only replaces WWD for PVWMA as an assignee of the MSWD water (on account for Devine & Wood), this section on the affected environment limits the discussion to the Devine & Wood lands in WWD and in MSWD. This section identifies the environmental trends that currently exist and the areas of concern that may be impacted by the Proposed Action. Refer to Figure 2 for a regional location map showing the location of the agencies and lands involved in the Proposed Action.

3.1.1 Background on Westlands Water District

Westlands Water District (WWD) covers almost 1,000 square miles of prime farmland located between the California Coast Range mountains and the trough of the San Joaquin Valley in western Fresno and Kings Counties [(Figure 2)]. WWD averages 15 miles in width and stretches 70 miles in length from Mendota on the north to Kettleman City on the south. Interstate 5 is located near the WWD's western boundary. The San Luis Canal (California Aqueduct), a major joint Federal/State water conveyance facility, traverses WWD east of I-5.

The Westlands Water District was formed under California Water District law in 1952 upon petition of landowners who urgently needed a surface water supply to supplement poor quality underground supplies that were being rapidly depleted. Negotiations between WWD and the U.S. Bureau of Reclamation (Reclamation) began to provide a dependable, supplemental supply of surface water through Reclamation's Central Valley Project (CVP) shortly after WWD's formation. At that time, the federal government was considering the development and construction of the CVP's San Luis Unit. This involved cooperation between the federal and state governments with regard to shared water storage facilities and conveyance systems.

When WWD was originally organized, it included approximately 376,000 acres. In 1963, WWD contracted with the federal government for long-term water service providing for 40 years of water service. In 1965, WWD merged with its western neighbor, Westplains Water Storage District, adding 210,000 acres. Additionally, lands comprising about 18,000 acres were annexed to WWD after the merger to form the current 604,000 acre district. The first deliveries of CVP water from the San Luis Canal to WWD began in 1968. The 1963 water service contract will terminate in 2007.

Of the gross 604,000 acres in WWD, approximately 570,000 acres are classified as irrigable. Water is delivered throughout WWD via 1,034 miles of underground pipelines, virtually eliminating seepage and evaporation losses in the distribution system. All water is metered at the point of delivery through more than 3,500 metered field turnouts. WWD contains three water service areas; these areas, referred to as priority areas, receive varying amounts of available water supply. The original WWD is referred to as Priority Area I and the Westplains area is referred to as Priority Area II. Priority Area I land has a contract amount of 900,000 af (approximately 2.6 af/acre) of CVP water annually, while Priority Area II has a contract amount of 250,000 af (approximately 1.3 af/acre) of CVP water annually. Priority Area III is land added to WWD after the merger and has no established water [allocation]. Priority Area III receives CVP water only if

water is available after the needs in Areas I and II are satisfied or if surplus water is available. Figure [3] shows the general location of the three Priority Areas within WWD.

WWD's annual contract amount is subject to shortages caused by drought and environmental and regulatory actions such as the Central Valley Project Improvement Act (CVPIA), the Endangered Species Act, and Bay/Delta water quality actions. The contract number for the 900,000 acre-feet contract in Priority Area I is 14-06-200-495A. The contract for the 250,000 acre-feet in Priority Area II was awarded to Westlands per the December 21, 1986 Barcellos Judgement (1999 FONSI).

With the approval of the 1999 FONSI, 6,260 af of MSWD's 13,300 af contract (14-06-200-3365A) was jointly assigned to WWD, PVWMA, and SCVWD.

WWD has an on-going effort to purchase and transfer water from other sources that would allow a better determination of the water supply sooner in the water year. Unlike water agencies with more abundant supplies, WWD must allocate (ration) water to its farmers, even in the wettest years. Average total demand for WWD has 1,460,092 af/y. With its annual CVP contract entitlement of 1,150,000 af/y, and an annual safe yield available from groundwater pumping of approximately 150,000 to 200,000 af/y, the total water supply available from a full CVP contract supply and from groundwater falls about 100,000 af short of the total water need. With future CVP water deliveries estimated at 65-70% of the contract amount or less, the total annual water supply shortage in WWD is at least 400,000 af. Thus, WWD and individual landowners when possible, must obtain supplemental water to help make up this deficiency.

3.1.1.1 Background on Devine & Wood Lands in WWD

The Devine & Wood farming entities have farmed in WWD for many years. Lands controlled by Devine & Wood include those owned and farmed by Devine & Wood (and associated entities), owned by Devine & Wood but leased to others, and lands leased from others and farmed by Devine & Wood on an annual basis. Devine & Wood lands located in Priority Area I are leased to others and will not receive the transferred water; lands located in Priority Area III are not able to take surface deliveries (well water only) and are also not included in this analysis (Figures 2 and 3). Therefore, the assigned water will go to Priority II lands.

Over the past six years the Devine & Wood farming entities have had an average of 4,595 acres in production; 35 percent of that acreage was planted to permanent crops in 2000 (Table 2). Devine & Wood's annual water needs in WWD over the past six years have averaged 9,894 af/y.

To meet these needs, Devine & Wood has historically had to supplement its WWD water supply with water transfers from MSWD, purchases and exchanges, and with groundwater pumping. Over the past six years, the WWD allocation to all of the Devine & Wood entities has averaged 6,073 af (Table 3). Average water transfers from MSWD into WWD have been 2,196 af/y for the same period. Additional purchases, exchanges, and groundwater pumping were required to make up the average deficiency of 1,625 af/y. Note that due to sustained above-average precipitation during this period, the average CVP allocation over the same time period has been 87% of contract entitlement (well above the estimated 65-70% of

the contract amount anticipated in future years). At a projected 70% allocation, the average deficiency is 2,051 af/y.

Table 2. Crop History-Devine & Wood Entities in WWD.

	1995		1996		1997		1998		1999		2000		Average	
	Ac	AF	Ac	AF	Ac	AF	Ac	AF	Ac	AF	Ac	AF	Ac	AF
Acala Cotton	305	802	0	0	0	0	0	0	55	145	0	0	60	158
Almonds	766	2,145	763	2,136	990	2,772	630	1,764	1,000	2,800	1,000	2,800	858	2,403
Barley	0	0	75	83	0	0	0	0	0	0	0	0	13	14
Bellpepper	275	578	305	641	0	0	150	315	150	315	122	256	167	351
Blackeye Beans	0	0	0	0	0	0	0	0	55	61	0	0	9	10
Broccoli	0	0	0	0	0	0	0	0	50	25	0	0	8	4
Cantaloupe	155	217	0	0	0	0	200	280	297	416	0	0	109	152
Cherry Trees	0	0	0	0	0	0	0	0	0	0	60	198	10	33
Corn Nuts	0	0	0	0	0	0	0	0	21	42	170	340	32	64
Corn Seed	0	0	0	0	0	0	0	0	0	0	77	154	13	26
Dehydrated Onions	0	0	0	0	0	0	0	0	0	0	90	207	15	35
Dryland Wheat	0	0	0	0	0	0	7	0	0	0	0	0	1	0
Fresh Garlic	403	645	515	824	485	776	995	1,592	593	949	437	699	571	914
Fresh Onions	80	184	0	0	155	357	196	451	75	173	0	0	84	194
Fresh Tomatoes	0	0	47	99	0	0	0	0	0	0	0	0	8	16
Honeydews	0	0	0	0	0	0	60	144	0	0	0	0	10	24
Lettuce (Spring)	60	48	0	0	0	0	0	0	525	420	425	340	168	135
Lettuce (Fall)	0	0	0	0	0	0	0	0	0	0	90	63	15	11
Lima Beans	0	0	0	0	0	0	235	259	270	297	0	0	84	93
Mixed Melon	0	0	155	217	285	399	118	165	0	0	0	0	93	130
Pima Cotton	1,063	2,796	1,096	2,882	1,196	3,145	980	2,577	635	1,670	0	0	828	2,179
Processing Tomatoes	1,250	2,625	1,041	2,186	650	1,365	975	2,048	974	2,045	421	884	885	1,859
Safflower	425	978	600	1,380	0	0	0	0	0	0	0	0	171	393
Sweet Corn	0	0	0	0	0	0	0	0	45	90	0	0	8	15
Upland Cotton	0	0	465	1,223	0	0	70	184	0	0	0	0	89	235
Watermelons	60	120	65	130	0	0	91	182	75	150	0	0	49	97
Wheat	140	209	570	849	0	0	555	827	0	0	155	231	237	353
Totals:	4,982	11,345	5,697	12,650	3,761	8,814	5,262	10,787	4,820	9,597	3,047	6,172	4,595	9,894

Farmed Acreage							
Owned	3,023		3,629		1,380	1,145	1,164
Lease/Purchase	0		1,270		601	1,322	1,583
Leased	1,959		798		1,780	2,795	2,073
Total	4,982		5,697		3,761	5,262	4,820
							3,047
							4,595

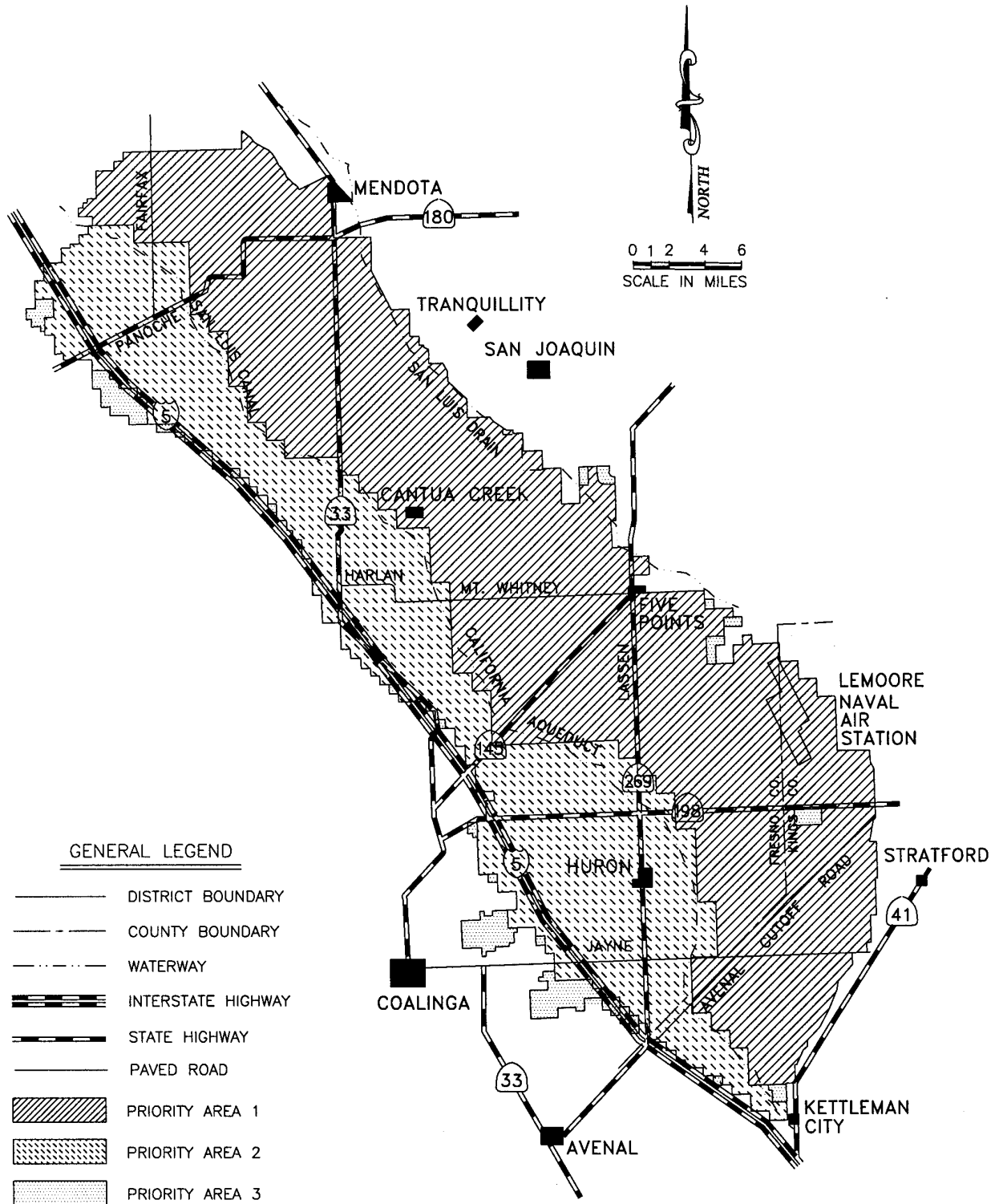
Table 3. Water Sources by Year-Devine & Wood Entities in WWD.

	1995 ¹	1996	1997	1998	1999	2000	Average	Projected
CVP Allocation	100%	95%	90%	100%	70%	65%	87%	70%
WWD Allocation	6,086	6,521	7,133	8,281	4,648	3,766	6,073	4,905
Mercy Springs Water	1,500	0	2,400	3,973	2,786	2,518	2,196	2,939 ²
Totals	7,586	6,521	9,533	12,254	7,434	6,284	8,269	7,843

¹ Year represents the water year from March to February. Example: 1995 is from March 1995 to February 1996.

² Based on 70% of the 4,198 AF MSWD contract.

Figure 3. Westlands Water District Priority Areas.



3.1.2 Background on Mercy Springs Water District

Located in northwestern Fresno County [(Figure 2)], the MSWD participates in the agricultural economy of the western San Joaquin Valley. Fresno County leads the nation in the value of its agricultural production. On the west side of the valley, this has been made possible by the delivery of irrigation water from the Sacramento-San Joaquin Delta via CVP and other water agencies' facilities. Most of the MSWD (the area south of the Outside Canal) also is located within the Panoche Drainage District, an agency responsible for managing runoff in the general area.

Land in the MSWD first came under limited cultivation in the late 1940s based on irrigation with well water. The District was formed in 1950. MSWD signed a long-term contract for CVP water in 1968, and deliveries from the Delta Mendota Canal (DMC) became the primary source of irrigation water, except in 1977-78 when a severe drought reduced CVP deliveries. Since 1990, CVP agricultural water contractors have been regularly subjected to decreased water allocations related to both hydrologic and regulatory conditions. Today [1998], MSWD comprises 3,392 acres of actively cultivated lands irrigated with both CVP and well water. MSWD receives all of its surface water supply through the DMC built by Reclamation and operated, since 1992, by the San Luis & Delta Mendota Water Authority under cooperative agreement with Reclamation. MSWD's contract with the federal government (Contract No. 13-06-200-336[5]A) for delivery and use of CVP water was renewed effective March 1, 1995 and remained in effect through February 28, 1998. MSWD [has] a new interim renewal contract effective through February 29, 2000. [Subsequent to the effective date of the 1998 FONSI, the MSWD interim water service contract has been renewed and is now effective through February 28, 2002.] As with all CVP contracts, Reclamation is approving only interim renewals (three years for the first renewal and two years for subsequent renewals) until the Programmatic Environmental Impact Statement pursuant to the Central Valley Project Improvement Act of 1992 (PL 102-575) is completed. The MSWD contract is for delivery of up to 13,300 af/yr of CVP water. Under Article 30 of MSWD's contract, partial and full assignments of the contract require the approval in writing of the Contracting Officer of Reclamation.

Total acreage under irrigation and the types of crops grown in the MSWD have changed little over time due in large part to constraints posed by high concentrations of salt and boron that naturally occur in the soils and a high, shallow water table requiring artificial drainage (MSWD, 1995). [Historically] crops mapped and inventoried in the MSWD by the California Department of Water Resources (June 1994) included cotton, sugar beets, rice, alfalfa, safflower, grain/hay, and melons (1998 FONSI).

The November 6, 1998 FONSI addressed the assignment of up to the entire 13,300 af/y of the MSWD water service contract to PVWMA. At the time of the FONSI approval, PVWMA had no facilities in place to make beneficial use of the CVP water and the contract assignment never occurred. Subsequently, on April 12, 1999, Reclamation approved the joint assignment of 6,260 af/y of MSWD's CVP contract to PVWMA, SCVWD, and WWD (1999 FONSI). MSWD currently has an interim contract for 2001 for 7,040 af/y (since 6,260 af/y was jointly assigned to PVWMA, SCVWD, and WWD). It is expected that a long-term contract will be in place prior to the expiration of the interim contract on February 28, 2002. If that long-term renewal contract is not in place, further interim renewal contracts are anticipated until a long-term contract is implemented.

Additionally, PDD has acquired 2,667 acres in MSWD (including the Devine & Wood lands) for use in its SJRWQIP. Upon approval of the Proposed Action, one landowner (725 ac) with 2,842 af/y will remain and continue to farm in MSWD.

3.1.2.1 Background on Devine & Wood Lands in MSWD

Devine & Wood have also farmed in MSWD for many years. Over the past six years an average of 1,071 acres have been in production; all of the acreage has been planted to annual crops (Table 4). Devine & Wood's annual water use in MSWD over the past six years has averaged 1,588 af/y using a combination of groundwater pumping and MSWD CVP entitlement.

Table 4. Crop History-Devine & Wood Entities in MSWD.

	1995		1996		1997		1998		1999		2000		Average	
	Ac	AF	Ac	AF	Ac	AF	Ac	AF	Ac	AF	Ac	AF	Ac	AF
Alfalfa	0	0	180	684	0	0	0	0	0	0	0	0	30	114
Seed Alfalfa	0	0	0	0	0	0	0	0	150	435	150	435	50	145
Barley	376	451	0	0	100	120	0	0	0	0	140	168	103	123
Corn	0	0	0	0	15	36	280	672	0	0	0	0	49	118
Acala Cotton	430	1,131	330	868	0	0	0	0	0	0	0	0	127	333
Pima Cotton	0	0	95	250	0	0	0	0	0	0	0	0	16	42
Safflower	0	0	0	0	100	230	0	0	0	0	237	545	56	129
Sugarbeets	0	0	100	310	483	1,497	480	1,488	0	0	0	0	177	549
Wheat	130	208	0	0	0	0	0	0	0	0	0	0	22	35
Subtotal:	936	1,790	705	2,112	698	1,883	760	2,160	150	435	527	1,148	629	1,588
Fallow	135	0	366	0	373	0	311	0	921	0	544	0	442	0
Totals:	1,071	1,790	1,071	2,112	1,071	1,883	1,071	2,160	1,071	435	1,071	1,148	1,071	1,588

As discussed in Section 1.4.2.4, Devine & Wood no longer own or farm land in MSWD since PDD has purchased the land, but continue to own the CVP water entitlement associated with the lands historically owned by them in MSWD. The Proposed Action allows for the partial contract assignment of the water associated with the Devine & Wood lands.

3.2 Affected Resources

3.2.1 Terrestrial Resources

All of the Devine & Woods lands in WWD are farmed—no new lands will be brought into production as a result of the Proposed Action. All of the Devine & Woods lands historically farmed in MSWD are now irrigated with drainage water as part of the PDD SJRWQIP—no new lands will be brought into production as a result of the Proposed Action.

3.2.1.1 Westlands Water District

WWD contains some of the most fertile and productive land in the world, commercially producing more than 40 different crops on approximately 570,000 irrigated acres. The primary crops grown in WWD include cotton, tomatoes, garlic, almonds, melons, lettuce, grains, and safflower. In recent years, vegetable and permanent crops have become a larger part of the crop acreage and cotton and grain acreage have decreased.

3.2.1.2 Mercy Springs Water District

Upon approval of the Proposed Action, one landowner (725 ac) with 2,842 af/y will continue to farm in MSWD. It is anticipated that the crops shown in Table 4 would typically be grown.

3.2.2 Water Resources

The amount of water available each year for CVP contractors in the western San Joaquin Valley is based on the storage of winter precipitation and control of spring runoff. The allocation of water to CVP contractors is determined by state water rights permits, judicial decisions, and state/federal obligations to maintain water quality, enhance environmental conditions, and prevent flooding. With the enactment of the CVPIA, Reclamation is required to provide more water for environmental purposes, especially for fishery needs and to wetland habitat areas, and shortages of water supplies to irrigation districts occur annually.

3.2.2.1 Westlands Water District

Within the WWD, surface water supplies are almost exclusively obtained through a contract with Reclamation for project water supplies through the CVP. Project water is used for reasonable and beneficial purposes but is generally not sufficient for all needs. In districts without sufficient surface water such as WWD, groundwater has been pumped, which has caused overdraft conditions and subsidence. Shallow aquifers can be contaminated by irrigation runoff, pesticides, and soluble, naturally occurring trace elements like selenium, boron, and arsenic.

Portions of WWD have dense clay layers that restrict the downward drainage of water and cause a near-surface saline water table. These areas are primarily on the eastern side of the district. The U.S. Geological Survey (USGS) completed a study in 1998 on the unconfined aquifer under the Panoche Creek alluvial fan which lies primarily within the northern area of WWD. The USGS report identified a groundwater divide that generally traverses the mid-fan areas of the alluvial fans of the western valley. The divide, with few exceptions, is east of the San Luis Canal and is generally parallel with the Coast Range. The divide is closer to the Coast Range in fine-textured interfan areas and farther from the Coast Range in coarse-textured fanhead areas (USGS, 1998). Devine & Wood farm land is west of the San Luis Canal on the western side of the district that has adequate drainage and does not have problems associated with near-surface saline water tables.

To allow land within the WWD to stay in agricultural production, groundwater pumping has been employed to help meet the irrigation requirements. This trend has led to an increase in groundwater overdraft in some areas and has been identified as causing subsidence in portions of the WWD. (USBR, 2000).

3.2.2.2 Mercy Springs Water District

The hydrogeology of the MSWD area is such that a layer of clay, known as Corcoran Clay, has divided the groundwater system into two major aquifers, a confined aquifer below it and a semiconfined aquifer above it. Poor drainage conditions, a direct result of the region's unique hydrogeological features, result in high water tables while high levels of evapotranspiration increase salt concentrations in the soil. Application of irrigation water dissolves the salts and trace elements found in the soil

accelerating their movement into the shallow groundwater. Approximately half of the soluble salts in the crop root zone are derived from the soil (USBR, 2000).

Drainage, salinization of soils and land disposal of toxic elements leached from the soil are pervasive problems through MSWD. Because agricultural land in the western San Joaquin Valley typically receives little rainfall, irrigation is necessary for most crops. Irrigation of the land without the provision of adequate drainage results in a rise in the water table in some areas. This, in turn, leads to waterlogging and evapo-concentration of salts and trace elements such as selenium and boron in the crop root zone.

3.2.3 Wildlife and Special Status Species

The environmental setting is restricted to the Devine & Wood controlled land within WWD and the MSWD area property. Surrounding areas, foothills and adjacent mountain areas are not included in this analysis.

3.2.3.1 Westlands Water District

*Biological resources in WWD are similar to those biological resources found in agricultural areas of Fresno, Kings, Madera and Merced Counties. The habitats are dominated by agricultural habitats. The cultivated areas include field crops, orchards, and pasture. The vegetation includes the crops and frequently includes weedy non-native annual and biennial plants. Common purslane (*Portulaca oleracea*), London rocket (*Sisymbrium irio*), field bindweed (*Convolvulus arvensis*), and barnyard grass (*Echinochloa crusgalli*) occur in irrigated fields. Turkey mullein (*Eremocarpus setigerus*), puncture vine (*Tribulus terrestris*), telegraph weed (*Heterotheca grandiflora*), and Canada horseweed (*Conyza canadensis*) occur along roads and in fallowed fields. Ripgut grass (*Bromus diandrus*), wild oats (*Avena fatua*), and common fiddleneck (*Amsinckia intermedia*) are among the species that occur in orchard lands. Kentucky fescue (*Festuca arundinacea*), dallisgrass (*Paspalum dilatatum*), perennial ryegrass (*Lolium perenne*), bermuda grass (*Cynodon dactylon*), white clover (*Trifolium repens*), bull thistle (*Cirsium vulgare*), spiny clotbur (*Xanthium spinosum*), cocklebur (*Xanthium strumarium*), and pacific rush (*Juncus effusus*) occur in pasture lands.*

*These types of vegetation support various species of birds that may occur in the cultivated areas, such as Brewer's blackbird (*Euphagus cyanocephalus*), red-wing blackbird (*Agelaius phoeniceus*), tricolored blackbird (*Agelaius tricolor*), mourning dove (*Zenaidura macroura*), American crow (*Corvus brachyrhynchos*), yellow-billed magpies (*Pica nuttalli*), white-crowned sparrow (*Zonotrichia leucophrys*), American robin (*Turdus migratorius*), western kingbird (*Tyrannus verticalis*), and American pipit (*Anthus spinoletta*). [Other wildlife] include house mouse (*Mus musculus*), deer mouse (*Peromyscus maniculatus*), California vole (*Microtus californicus*), Botta's pocket gopher (*Thomomys bottae*), gopher snake (*Pituophis melanoleucus*), king snake (*Lampropeltis getulus*), western fence lizard (*Sceloporus occidentalis*), red tail hawk (*Buteo jamaicensis*), Swainson's hawk (*Buteo swainsoni*), and coyote (*Canis latrans*). Near the rivers and canals with water and some vegetation, great blue heron (*Ardea herodias*), great egret (*Casmerodias albus*), and white-faced ibis (*Plegadis chihi*) occur, especially near the San Joaquin River.*

Special status species that could occur in agricultural areas of Fresno County include blunt-nosed leopard lizard, Fresno kangaroo rat, giant kangaroo rat, Tipton kangaroo rat (Dipodomys nitratoideus), short-nosed kangaroo rat (Dipodomys nitratoideus brevinaus), San Joaquin kit fox, valley elderberry longhorn beetle, white-faced ibis, Swainson's hawk, tricolored blackbird, burrowing owl, golden eagle, American peregrine falcon (Falco peregrinus anatum), prairie falcon (Falco mexicanus), Aleutian Canada goose, loggerhead shrike, San Joaquin antelope squirrel, western spadefoot, San Joaquin pocket mouse, black-shouldered kite, and palmate bird's beak. (USBR, 2000).

Special status species have been identified in recent years within the WWD boundaries, as summarized in table 5.

Table 5. Special Status Species Recently Observed In WWD.

SPECIES	COMMON NAME	GENERAL LOCATION	DATE LAST OBSERVED
Eremophila alpestris actia	California horned lark	East of I-5 near Mountain View at Panoche Junction	1992
Gambelia silus	Blunt nosed leopard lizard	Near Turney Hills and Polvadero Gap	1979
Gambelia silus	Blunt nosed leopard lizard	Panoche Hills and Southeast of Coalinga	1980
Vulpes macrotis mutica	San Joaquin pocket mouse	South of Kettleman Compressor Station	1982
Dipodomys nitratoideus nitratoideus	Tipton kangaroo rat	About 3.5 miles south southwest of Lemoore NAS	1985
Vulpes macrotis mutica	San Joaquin kit fox	Lemoore Naval Air Station	1982
Vulpes macrotis mutica	San Joaquin kit fox	Near Mendota from State Highway 58 to Five Points	1988
Vulpes macrotis mutica	San Joaquin kit fox	Five Points to Antelope Plain	1989
Vulpes macrotis mutica	San Joaquin kit fox	Along the California Aqueduct from Laton south	1992
Various	Great valley mesquite scrub	Along Los Gatos Creek and near Polvadero Gap	1987

(Source: CH2M-Hill, 1999)

3.2.3.2 Mercy Springs Water District

John H. Harris, a certified wildlife biologist with Environmental Consulting, conducted a preliminary biological assessment of the Devine & Wood property located within MSWD. Two site visits were made to the project area. One on 2 June, 2000 and another on 18-19 June, 2000. The focus of the assessment was on the potential for occurrence of listed Threatened and Endangered species, the potential for occurrence of other Special Status Species, and the general value of the project area for wildlife. The site visits included driving the perimeter of the project several times, walking along levees and drainage ditches, and making selected stops at various locations within the project area. The areas along the drainage ditches and levees were systematically searched for signs of wildlife, including burrows, scat and tracks. Small mammal live traps were set and left overnight at four locations associated with drainage ditches or canals in order to determine whether the habitat supported small mammals that might be prey for raptors or wading birds.

No state or federal listed Threatened or Endangered Species were encountered during fieldwork. Based on a review of habitat requirements and distribution records, the biologist concluded that most of the listed species in the general area appear to be unlikely to occur on the project area. No listed birds are likely to occur in the project area, but three California Bird Species of Concern were encountered: burrowing owl, loggerhead shrike, and white-faced Ibis. A copy of the biologist's survey report has been included in the Appendix for reference.

All Devine & Wood land within MSWD was historically cultivated and no native vegetation occurs within its boundaries. Immediately adjacent to MSWD on the west

side of Russell Avenue between the Outside and Main Canals, and north of the Outside Canal to the east of the District are some remnant patches of saline alkali wetland scrub (USBR, 1998). Within the MSWD, larger canals and ditches support marsh vegetation, such as cattails and sedges. Ditches and canals generally have a narrow band, up to 20 feet from the edge of the bank, of grasses or other herbaceous vegetation. Much of the vegetation in these strips appears to be salt tolerant species, including annual *Atriplex* species and salt grass (*Distichlis*).

Ditches and canals in the area support a variety of birds. Marsh birds including marsh wren, song sparrow, common moorhen and red-winged blackbird are found in marsh vegetation, such as cattails and sedges supported by larger canals and ditches. Three Sensitive Species of birds have been observed on or near the project area, and a fourth is likely to occur in winter or as a transient. The burrowing owl (*Athene cunicularia*) uses ground squirrel burrows in road sides, levees and ditch banks for nesting and shelter, and forage for insects and other small prey in surrounding fields. The tricolored blackbird (*Agelaius tricolor*) prefers freshwater marshes with dense emergent vegetation. Tricolored blackbirds are highly colonial, and prefer to nest in dense aggregations. Tricolored blackbirds are likely to occur as fall and winter transients. Breeding is less likely due to the restricted extent of suitable habitat, but it is possible that nesting occurs occasionally. The loggerhead shrike (*Lanius ludovicianus*) is found in open arid habitats throughout the foothills, Central Valley and deserts of California. They are likely to use the area frequently. The white-faced Ibis (*Plegadis chihi*) is a wading bird associated with wetland habitats. Given the presence of these birds in the Grasslands area, it is likely that they use the project area for foraging on an occasional basis.

Because the project lacks natural vegetation and the entire area is either cultivated, graded, or modified into drainage ditches and canals it is unlikely that any listed species would be likely to occur on the project site. Special status species that could occur, most likely as transients, in the site area include blunt-nosed leopard lizard (*Gambelia silus*), giant garter snake (*Thamnophis gigas*), San Joaquin antelope squirrel (*Ammospermophilus nelsoni*), giant kangaroo rat (*Dipodomys ingens*), Fresno kangaroo rat (*Dipodomys nitratoides exilis*), and San Joaquin kit fox (*Vulpes macrotis mutica*).

Wildlife and special status species impacts resulting from the PDD SJRWQIP are addressed in the 2000 SJRWQIP Phase I CEQA Initial Study (see Section 1.4.2.4).

3.2.4 Archeological and Cultural Resources

3.2.4.1 Westlands Water District

In the WWD area, the San Joaquin Valley supported extensive populations of Native Americans, principally the Northern Valley Yokuts, in the prehistoric period. After Spanish and Mexican incursions in the early 19th century, coupled with the introduction of European-born epidemics, Native American populations declined and became culturally extinct in the San Joaquin Valley by the mid-19th century. The extent of cultural studies in the San Joaquin Valley is limited. The reclamation of land and intensive farming practices over the last century has probably destroyed many Native American occupation sites.

3.2.4.2 Mercy Springs Water District

There are no cultural resources, historic or prehistoric, in the MSWD or its vicinity listed with the National Register of Historic Places, the California Historical Landmarks, or the California Points of Historical Interest. Eagle Field, one mile west of MSWD, was used as a pilot training center in World War II and now operates a museum with artifacts from that era. Eagle Field is not on the National Register of Historic Places. Any Native American occupation sites have probably been destroyed by intensive farming practices that have happened over the last century.

3.2.5 Indian Trust Assets

Indian Trust Assets are legal interests in property or rights held in trust by the United States for Indian Tribes or individual Native Americans. Trust status originates from rights imparted by treaties, statutes, or executive orders. Such assets cannot be sold, leased, or otherwise alienated without federal approval.

Indian reservations, rancherias, and allotments are common Indian Trust Assets. Allotments are parcels of land held in trust for specific individuals that may be located outside reservation boundaries. In addition, such assets include the right to access certain traditional areas and perform traditional ceremonies.

3.2.6 Environmental Justice

The February 11, 1994 Executive Order requires federal agencies to ensure that their actions do not disproportionately impact minority and disadvantaged populations.

The market for seasonal workers on local farms draws many thousands of migrant workers, commonly of Hispanic heritage from Mexico and Central America. The population of some small communities like Mendota typically increases during late summer harvest.

3.2.7 Socio-Economic Resources

WWD and MSWD are primarily rural agricultural lands. There are many communities and a few cities in the surrounding area that are homes for farm workers. In addition, there are numerous small businesses that support agriculture such as feed and fertilizer sales, machinery sales and service, pesticide applicators, transport, packaging, marketing, etc. The project will not dramatically affect the socio-economic resources of either area. Although the value of crops grown will be modified, no farmland will be removed from production as a result of the transfer; instead, the water supply for highly productive land supporting labor-intensive crops will be increased, improving the sustainability of agriculture on that land.

SECTION 4 - ENVIRONMENTAL CONSEQUENCES/COMMITMENTS

Other than proper consultation and coordination with listed agencies, there are no specific activities and measures that are to result from this action to improve or enhance the environment.

4.1 Introduction

This action is a formal partial assignment of a water service contract, resulting in the permanent use of water in the WWD which has historically been transferred annually from MSWD to WWD. The availability of this Project water would not result in the cultivation of additional farmland or native untilled land in the Contractor's service area.

4.2 Environmental Consequences

4.2.1 Terrestrial Resources

4.2.1.1 Proposed Action

Under the Proposed Action, there will be no construction or modification of Project facilities. The approval of the proposed action will not interfere with Project obligations to deliver water to other contractors or fish and wildlife areas. Specifically, the transfer of Project water would not have an adverse effect on unique geological features such as wetlands, wild or scenic rivers, refuges, flood plains, rivers placed on the nationwide river inventory, or prime or unique farmlands. No native, untilled lands will be cultivated by the use of this water.

4.2.1.2 No-Action Alternative

Under the No-Action alternative, annual water transfers from MWSD or other sources would be used to keep the Devine & Wood land in WWD in production. The land in MSWD would continue to be involved in the PDD's SJRWQIP.

4.2.1.3 Cumulative Impacts

Under the Proposed Action or the No-Action Alternative, there are no additional impacts that would contribute to cumulative terrestrial resource impacts.

4.2.2 Water Resources

4.2.2.1 Proposed Action

The Proposed Action would not affect CVP operations and would not change existing diversion points. The transferred water would be conveyed by the San Luis Canal rather than the Delta Mendota Canal. This transfer of water by the same farming entity will balance out local deficiencies and make the most beneficial use of available supplies. Transfer of this water into WWD would reduce the need for transfers of alternate sources of surface water.

The proposed action will not interfere with Reclamation's obligations to deliver water to other contractors, wetland habitat areas, or for other environmental purposes.

The transfer and exchange of water is clearly considered to be a beneficial use by state water law. In general, the overall supply of CVP water is insufficient for every demand. Transfers and exchanges help balance out local deficiencies caused by delivery schedules, insufficient storage, and uneven demand.

4.2.2.2 No-Action Alternative

Under the No-Action alternative, annual water transfers from MWSD or other sources would be used to keep the Devine & Wood land in WWD in production. The land in MSWD would continue to be involved in the PDD's SJRWQIP.

4.2.2.3 Cumulative Impacts

Under the Proposed Action or the No-Action Alternative, there are no additional impacts that would contribute to cumulative water resource impacts.

4.2.3 Wildlife and Special Status Species

4.2.3.1 Proposed Action

The proposed action would not interfere with Reclamation's acquisition of water for refuges and fisheries as required by the CVPIA.

Under the Proposed Action, no negative impacts to plants or wildlife are anticipated as no native, untitled lands would be irrigated or receive the transferred water. The water would be delivered to established croplands through existing canals and ditches. Lands historically owned by Devine & Wood in MSWD has been planted with salt tolerant crops irrigated with drainage water as part of an unrelated action that will occur whether or not the proposed partial contract assignment occurs. In addition, the utilization of existing ditches supplying the affected lands will not change as a result of this proposed assignment.

No species listed or proposed to be listed as endangered or threatened, would be affected.

4.2.3.2 No-Action Alternative

Under the No-Action alternative, annual water transfers from MWSD or other sources would be used to keep the Devine & Wood land in WWD in production. The land in MSWD would continue to be involved in the PDD's SJRWQIP.

4.2.3.3 Cumulative Impacts

Under the Proposed Action or the No-Action Alternative, there are no additional impacts that would contribute to cumulative wildlife and special status species resource impacts.

4.2.4 Archeological and Cultural Resources

4.2.4.1 Proposed Action

Under the proposed action, no excavation, construction, or land use changes would result from the transfer of the CVP water. Existing CVP, district and landowner canals will convey the water to established farmlands. Therefore, it is unlikely that any cultural resources would be affected by the proposed transfers. No properties listed or eligible to be listed in the national Register of Historical Places would be affected.

4.2.4.2 No-Action Alternative

Under the No-Action Alternative, CVP water would continue to be conveyed to contractors in existing canals and there would be no effect on cultural resources.

4.2.4.3 Cumulative Impacts

Under the Proposed Action or the No-Action Alternative, there are no additional impacts that would contribute to cumulative archaeological and cultural resource impacts.

4.2.5 Indian Trust Assets

4.2.5.1 Proposed Action

Indian Trust Assets are not known to exist within the service area, therefore, the Proposed Action will not have any effect on Indian Trust Assets.

4.2.5.2 No-Action Alternative

No changes in Indian Trust Assets will occur under the No-Action Alternative since Indian Trust Assets are not known to exist within the service area.

4.2.5.3 Cumulative Impacts

Under the Proposed Action or the No-Action Alternative, there are no additional impacts that would contribute to cumulative Indian Trust Asset impacts.

4.2.6 Environmental Justice

4.2.6.1 Proposed Action

The proposed action does not alter the amount of farmland actively cultivated. The MSWD land would be planted with lower valued crops and the WWD land would have higher value crops planted on it. These modifications would have an insignificant effect on agricultural production and employment within the service areas. No revenue would be generated for the contractors from transfers of this water. The Proposed Action will not affect minority disadvantaged populations.

4.2.6.2 No-Action Alternative

The No-Action Alternative will not affect minority disadvantaged populations, with the possible exception that if the transfer does not occur, productive land within WWD may or may not be planted depending on future water supplies, which could affect employment opportunities.

4.2.6.3 Cumulative Impacts

Under the Proposed Action or the No-Action Alternative, there are no additional impacts that would contribute to cumulative environmental justice impacts.

4.2.7 Socio-Economic Resources

Neither the Proposed Action nor the No-Action Alternative will affect the quality of the human environment, involve unresolved conflicts concerning alternative uses of available resources, nor have significant adverse effects on public health or safety. CVP contractors are responsible for obtaining and managing water for the benefit of their members in consideration of local economic conditions and employment.

4.2.7.1 Proposed Action

Under the proposed action, the status quo of agriculture would be maintained. CVP contractors would re-distribute CVP water to balance out local deficiencies in water supply, reduce waste, and promote efficient irrigation of crops. The most productive farmland would remain in production. Seasonal labor requirements would have very little change, and businesses that support agriculture would not be financially harmed. The transfer will allow more productive and labor-intensive land to remain in production, thereby improving socio-economic conditions in the region.

4.2.7.2 No-Action Alternative

Under the No-Action Alternative, the lack of flexibility to beneficially use water could be problematic for farms and businesses and there could be a negative impact on socio-economic conditions by keeping lower value land in production and possibly allowing more productive land to be idle depending on future water supplies.

4.2.7.3 Cumulative Impacts

Under the Proposed Action or the No-Action Alternative, there are no additional impacts that would contribute to cumulative socio-economic resource impacts.

4.2.8 Cumulative Effects

4.2.8.1 Proposed Action

Under the proposed action, the transfer would limit any cumulative impacts. Reclamation has determined that there would be no identifiable impacts to Project operations from the proposed action.

4.2.8.2 No-Action Alternative

Operations would remain status quo under the No-Action Alternative so there would be no cumulative effect. Other alternatives may alter the need and amount of other available diversions that could represent significant changes to CVP operations and involve considerable uncertainty and risk.

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SECTION 6 - CONSULTATION AND COORDINATION

This EA was prepared in consultation and coordination with the Fish and Wildlife Service, which is responsible for enforcement of the Endangered Species Act for species other than marine mammals and anadromous fish. Because the transactions would involve Project water after it has been diverted from the Sacramento-San Joaquin River Delta, Reclamation determined there would be no adverse affects on endangered or threatened anadromous fish in the Delta and therefore did not need to consult with the National Marine Fisheries Service.

National Environmental Policy Act

This EA was prepared pursuant to regulations implementing the NEPA (42 USC 4321 *et seq.*). NEPA provides a commitment that federal agencies will consider the environmental effects of their actions. This EA provides information regarding alternatives and the No-Action Alternative.

California Environmental Quality Act

Implementation, funding, and permitting actions carried out by state and local agencies must comply with CEQA. The CEQA requirements are similar to NEPA requirements. This EA could be used as a basis for preparation of a CEQA document.

Fish and Wildlife Coordination Act

The Fish and Wildlife Coordination Act requires that Reclamation consult with federal and state fish and wildlife agencies on all water development projects that could affect biological resources. After discussions with the Fish and Wildlife Service, Reclamation has determined that the Proposed Action will not trigger the FWCA.

SECTION 7 - REFERENCES

Belitz, Kenneth. 1988. *Character and Evolution of the Ground-water Flow System in the Central Part of the Western San Joaquin Valley, California*. U.S. Geological Survey. Open-File Report 87-573. Regional Aquifer System Analysis.

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